REMARKS

The rejection of Claim 18 under 35 U.S.C. § 103(a) as unpatentable over U.S. 5,726,440 (Kalkhoran et al) in view of U.S. 6,259,137 (Sadana et al), is respectfully traversed.

Claim 18 reads as follows:

A semiconductor substrate comprising:

first and second surfaces; and

an oxide film apart from said first and second surfaces and extending throughout said semiconductor substrate, wherein the distance between said oxide film and said second surface is not less than 200 nm.

Kalkhoran et al discloses a wavelength selective photodetector including a substrate, preferably Si-based, having a buried insulator layer, and a photodetection element formed an upper section of the substrate, wherein the insulator layer is preferably fabricated at a selected depth in the substrate and electrically isolates a lower section of the substrate located below the insulator from the upper section of the substrate located above the insulator, wherein the insulator layer may be, for example, silicon oxide or silicon dioxide (column 2, lines 47-59).

Sadana et al discloses a method of fabricating a defect-induced buried oxide (DIBOX) region in a semiconductor substrate utilizing a first low energy implantation step to create a stable defect region; a second low energy implantation step to create an amorphous layer adjacent to the stable defect region; oxidation and, optionally, annealing; and silicon-on-insulator (SOI) materials comprising said semiconductor substrate having said DIBOX region (Abstract). The Examiner relies on Fig. 3 therein, which describes a wafer wherein **10** represents a Si substrate, **16** represents a BOX region, and **30** represents a SOI region formed by masking Si substrate **10** (column 7, lines 63-65).

The Examiner holds that it would have been obvious "to include the required buried oxide thickness in [Kalkhoran et al] as taught by [Sadana et al] in order to have a semiconductor structure with increased performance."

In reply, it is not clear why one skilled in the art would have combined Kalkhoran et al and Sadana et al, but even if combined, the result would not be the presently-claimed invention. The buried insulator layer of Kalkhoran et al and the DIBOX layer of Sadana et al appear to have different purposes. Moreover, neither reference discloses nor suggests the limitation in Claim 18 that "the distance between said oxide film and said second surface is not less than 200 nm." The Examiner appears to have misinterpreted this limitation, because the rejection refers to buried oxide thickness. The claim under rejection, however, relates to a distance of the oxide film from a surface, not the thickness of the oxide film *per se*.

For all the above reasons, it is respectfully requested that the rejection over Kalkhoran et al in view of Sadana et al be withdrawn.

Applicants gratefully acknowledge the Examiner's allowance of Claims 1-4, 6, 8-12 and 17. Nevertheless, Applicants respectfully submit that all of the presently-pending claims in this application are now in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

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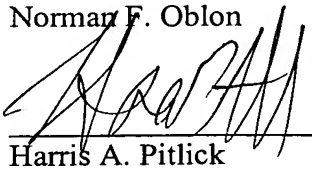

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